

Title (en)
POWER LINE SENSORS AND SYSTEMS INCORPORATING SAME

Title (de)
STROMLEITUNGS-SENSOREN UND SYSTEME DAMIT

Title (fr)
CAPTEURS SUR LIGNES ELECTRIQUES ET SYSTEMES LES COMPRENANT

Publication
EP 1733243 A4 20120704 (EN)

Application
EP 05724482 A 20050304

Priority

- US 2005006944 W 20050304
- US 80341104 A 20040318

Abstract (en)
[origin: US2004183522A1] An apparatus for sensing the current in a power line of a power system and systems incorporating the apparatus are disclosed. The apparatus may comprise an enclosure providing a window operable to permit the passage of the power line therethrough. The apparatus may further comprise an active current transformer set within the enclosure and operative to produce a scaled version of the current. The apparatus may further comprise an amplifier coupled with the active current transformer and operative to reduce the phase shift and ratio error between the current and the scaled version of the current. The apparatus may further comprise a powering current transformer set within the enclosure and operative to receive power from the power line on a primary winding and deliver power on a secondary winding. The apparatus may further comprise power supply circuitry set within the enclosure, the power supply circuitry powered through the secondary winding from the powering current transformer and operative to supply power to the amplifier. The apparatus may further comprise at least one of secondary leads and secondary terminals extending from the enclosure, coupled with the active current transformer and operative to deliver the scaled version of the current outside of the enclosure.

IPC 8 full level
G01R 21/00 (2006.01); **G01R 15/18** (2006.01); **G01R 21/133** (2006.01); **G01R 19/25** (2006.01)

CPC (source: EP US)
G01R 15/185 (2013.01 - EP US); **G01R 15/186** (2013.01 - EP US); **G01R 21/133** (2013.01 - EP US); **G01R 15/181** (2013.01 - EP US); **G01R 19/2513** (2013.01 - EP US)

Citation (search report)

- [XDY] US 3534247 A 19701013 - MILJANIC PETAR N
- [X] US 5066904 A 19911119 - BULLOCK DONALD F [US]
- [A] FR 2538120 A1 19840622 - ENERTEC [FR]
- [A] WO 02071081 A1 20020912 - VACUUMSCHMELZE GMBH & CO KG [DE], et al
- [A] US 5307008 A 19940426 - SO EDDY [CA]
- [XA] EP 0838686 A2 19980429 - GEN ELECTRIC [US]
- [A] US 5502374 A 19960326 - COTA ROGER S [US]
- [Y] US 4847780 A 19890711 - GILKER CLYDE [US], et al
- See references of WO 2005091958A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2004183522 A1 20040923; US 7174261 B2 20070206; CA 2559666 A1 20051006; EP 1733243 A2 20061220; EP 1733243 A4 20120704; US 2007136010 A1 20070614; WO 2005091958 A2 20051006; WO 2005091958 A3 20060615

DOCDB simple family (application)
US 80341104 A 20040318; CA 2559666 A 20050304; EP 05724482 A 20050304; US 2005006944 W 20050304; US 65296807 A 20070112